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d.) Amendments to the drawings:

Attached are copies of Figures 9e and 9g with the proposed changes marked to indicate red. Also included are formal replacement sheets of such figures on which the changes are included.

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e.) Remarks:

Reconsideration of this application as amended is respectfully requested.

The courtesy of Examiner Day and Supervisory Examiner Homere in granting applicant and his attorney an interview on August 15, 2005 is acknowledged with thanks. At the interview applicant explained that his invention is one which enables a client or customer desiring a rotary cutting tool to select the general style of the tool, e.g., a two-flute tapered end mill, a three-flute tapered end mill, a four-flute tapered end mill, or otherwise, from a display thereof following which the client can create the specific tool configuration according to the client's own specifications, rather than according to a predetermined array of possible specifications or dimensions provided by the tool supplier.

To illustrate the differences between applicant's invention and the conventional tool ordering practices, applicant showed the examiners one of applicant's company's catalogs which illustrate a plurality of different kinds of tools, along with the dimensions, angles, and other particulars available from the supplier and which a customer can specify when ordering a tool from the catalog. One of the examiners commented it appeared that applicant's invention involved a selection process wherein the customer was able to select particulars from choosable specifications using his own computer connected to the tool supplier's data base. As an example, the examiner commented that, should a customer wish to order a particular automobile from a dealer, the customer could select from the dealer's menu

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a vehicle model, the number of doors, the color, the upholstery, and the like.

Applicant acknowledged that these choices can, indeed, be made by the customer from a list of possible choices available from the vehicle dealer or manufacturer. However, applicant pointed out that, if the customer desired something not included in the available menu offerings, such as a particular style vehicle having five wheels, it would not be possible for the customer to make such a selection because the manufacturer does not offer a five-wheel vehicle. In applicant's invention, however, once the particular tool style has been selected it then is possible for the customer or client to use applicant's invention to customize the selected tool style to produce a tool having the client's specifications, rather than the tool supplier's specifications.

Applicant's invention, therefore, is not simply one wherein the customer or client makes a selection of particulars proffered by the supplier, but instead enables a tool to be produced according to the client's wishes, thereby enabling the client to design the tool as he wishes it to be. If the vehicle manufacture were to use a program like applicant's, then the prospective customer could, indeed, specify a five-wheel vehicle and design it according to the customer's wishes.

To illustrate further the uniqueness of applicant's invention, applicant initiated communication between the examiner's computer and applicant's factory and demonstrated how a customer or client could design a tool from an initially selected tool style, such as a complex tapered end mill. Virtually everything following the selection of the tool style was a modification or customization of the tool body to conform the end tool design

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to the customer's specification. The procedure resulted in the design of the specific tapered end mill according to design characteristics not specified or offered by the tool supplier, but instead, as specified by the customer.

Applicant demonstrated that the entire design procedure was completed in a matter of a few minutes, at most, even as the applicant was explaining to the examiners what was being done, step by step. Applicant, who is the chief executive of the company which supplies the tools designed according to the invention, is intimately familiar with the procedures which were in use prior to the invention, and such familiarity was obtained by actual performance of the tool selection processes of the prior art as is done, for example, using the aforementioned catalog. Applicant explained that the prior art processes of providing tools frequently required several days of intensive cooperation between a customer and the tool factory to produce a tool not specifically conforming to catalog specifications and which would be satisfactory to the customer. However, as is noted above, applicant demonstrated that the practice of his invention enabled even a complex tool, such as a tapered end mill, to be designed and ordered in less than five minutes, even though most of the design characteristics were specified by the customer.

The uniqueness of applicant's invention also is exhibited by the observation made by applicant that, although his company has produced multiple tools that conform exactly to each other for a single customer (that is, wherein additional tools after the first one were manufactured as a result of repeat orders), his company has yet to produce an identical tool for two or

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more customers. This is because each customer requires a tool having specialized characteristics to perform the cutting tasks desired by the customer. Some of the differences in tools ordered by different customers are the result of differences in philosophy of different individuals, as well as differences in machining techniques, machine capabilities, and the kinds of workpiece materials being cut. The fact that two or more customers have never ordered the exact cutting tool demonstrates the need for a process which enables tool buyers to design tools according to the buyers' specific preferences and requirements. This applicant has done. Applicant knows of no one, other than his own company, who offers a system which can satisfy such diverse needs and preferences of the tool buyers.

The claims of this application have been amended in such manner as to distinguish applicant's invention more clearly over the known prior art. Some of the claims which did not originally refer to cutting tools have been so amended that all claims now are oriented to cutting tools, rather than to more general products. Consequently, it is respectfully submitted that the prior art of record is inapplicable to the claims as amended. In support of this observation it is submitted that the primary reference, Chan et al, relates to the placement of specific pieces of furniture in relationship to other furniture. The disclosure of Chan et al has nothing at all to do with the design of a cutting tool and, therefore, cannot anticipate applicant's claimed invention.

Harasaki et al relates to a system and method for adorning an existing watch according to various enhancements provided by the watch

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supplier. The Harasaki et al system is simply one wherein the watch supplier provides a prospective customer with a plurality of design features any one or more of which the customer can select. However, the customer has nothing at all to do with the creation of the design features or providing his own design features in lieu of those provided by the supplier.

Habel et al relates to the selection of tools and workpiece machining techniques for enhancing machining operations. It has nothing to do with the designing of tools, much less enabling the tool buyer to participate in the design of the tool.

Since none of the references relied upon in the final rejection of applicant's claims has anything at all to do with the designing of tools, none of such references can anticipate applicant's claims. Neither does any reference contain any suggestion of the extensive modification that would be required of any one or all of such references to arrive at applicant's claimed apparatus and method. The amendments to the claims to direct them more particularly to the cutting tool art further distances the claims from the disclosures of the references. Accordingly, there is nothing in any of the references which supplies the motivation necessary to modify any of the references in a manner that will even approach applicant's invention.

The amendments to the claims do not introduce any new matter. The entire specification relates to tool design and many of the originally presented claims were limited to the cutting tool field. See claims 10-22. None of the amended claims goes beyond these parameters, although some of the claims, as amended, do recite with somewhat greater

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specificity some of the structural and procedural aspects of the apparatus and methods. However, the more specific recitations are inherent, as well as implicit, in the claims as they appeared prior to this amendment.

Accordingly, it is respectfully submitted that none of the amendments present any new issues requiring further searching or consideration of any previously non-considered issue.

The rejection of claim 20 as set forth in paragraph 4 of the Office action is not understood. Claim 20 recites certain structural features, all of which are either illustrated in the drawings, or described in the specification, or both. It is possible the rejection of claim 20 was intended to refer to claim 19. Claim 19 has been amended to address this possibility. If the rejection of claim 20 on the stated ground is maintained the examiner is respectfully requested to explain the rejection in more detail.

The inconsistencies in the drawings thoughtfully pointed out by the examiner have been corrected as follows:

The objection set forth in paragraph 2.1(a) of the last Office action with respect to the reference character 178 has been overcome by omitting such reference character from line 1 of page 11; the objection in paragraph 2.1(b) to the dimension 212 in line 5 of page 13 has been overcome by changing the reference character to 204; the objection set forth in paragraph 2-2 has been overcome by changing the alert user reference character 146 to 148; the objection in paragraph 2-3 has been overcome by revising lines 5-8 of page 8 to conform to Figure 8; and the objection in paragraph 2-4 has been overcome by revising Figure 9g.

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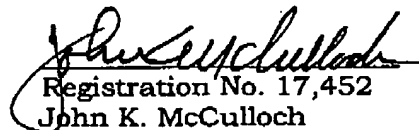
It is believed this amendment qualifies for entry under the provisions of 37 CFR 1.116 because it responds to formal objections previously made and because it places the claims in condition for allowance or in better form for appeal.

The Office is authorized to charge Deposit Account No. 50-2676 the amount of \$60 in payment of one month's extension of time fee.

The Office is authorized to charge or refund any fee deficiency or excess to Deposit Account No. 50-2676.

Respectfully submitted,

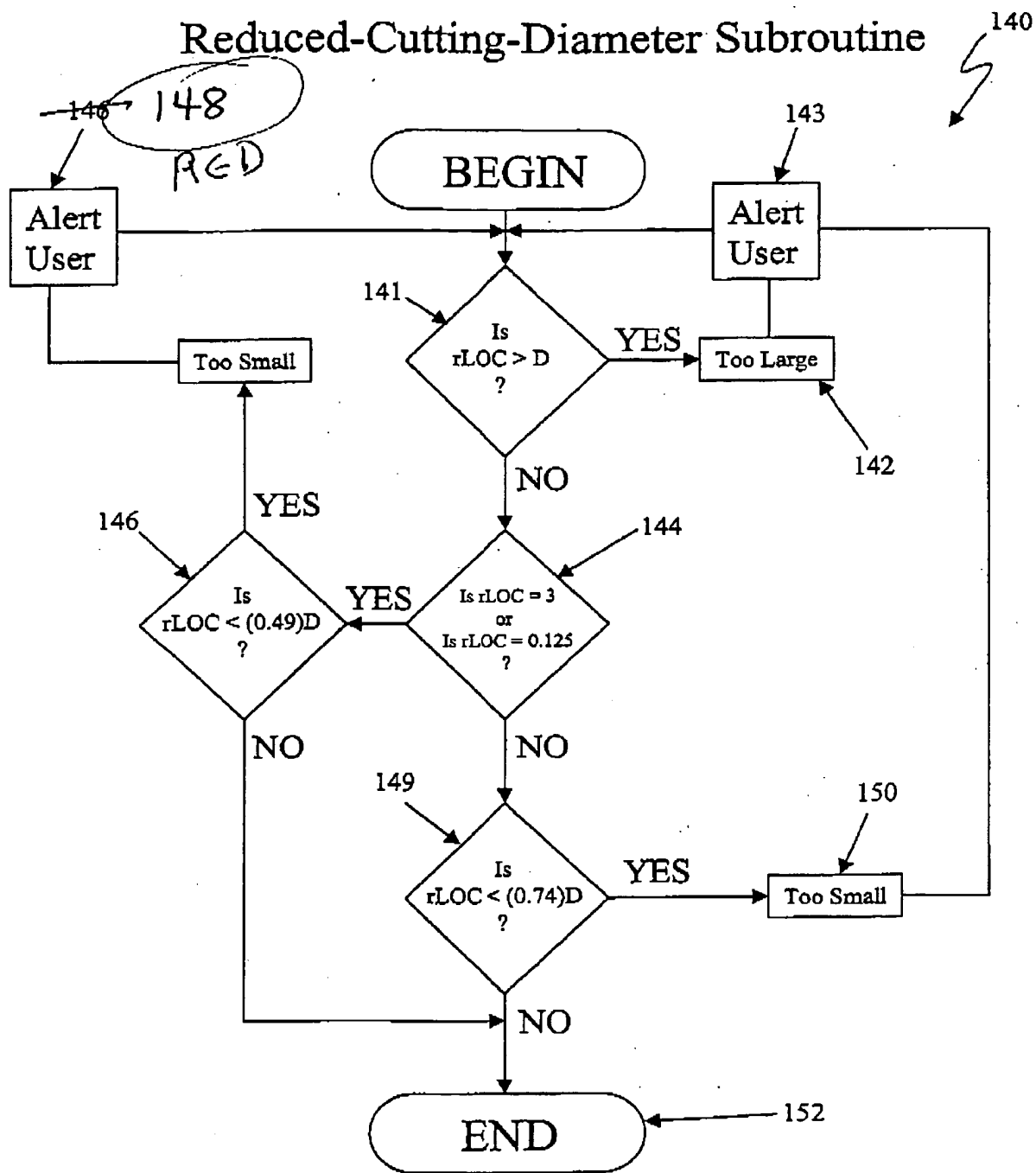
David J. Povich  
By his attorney,



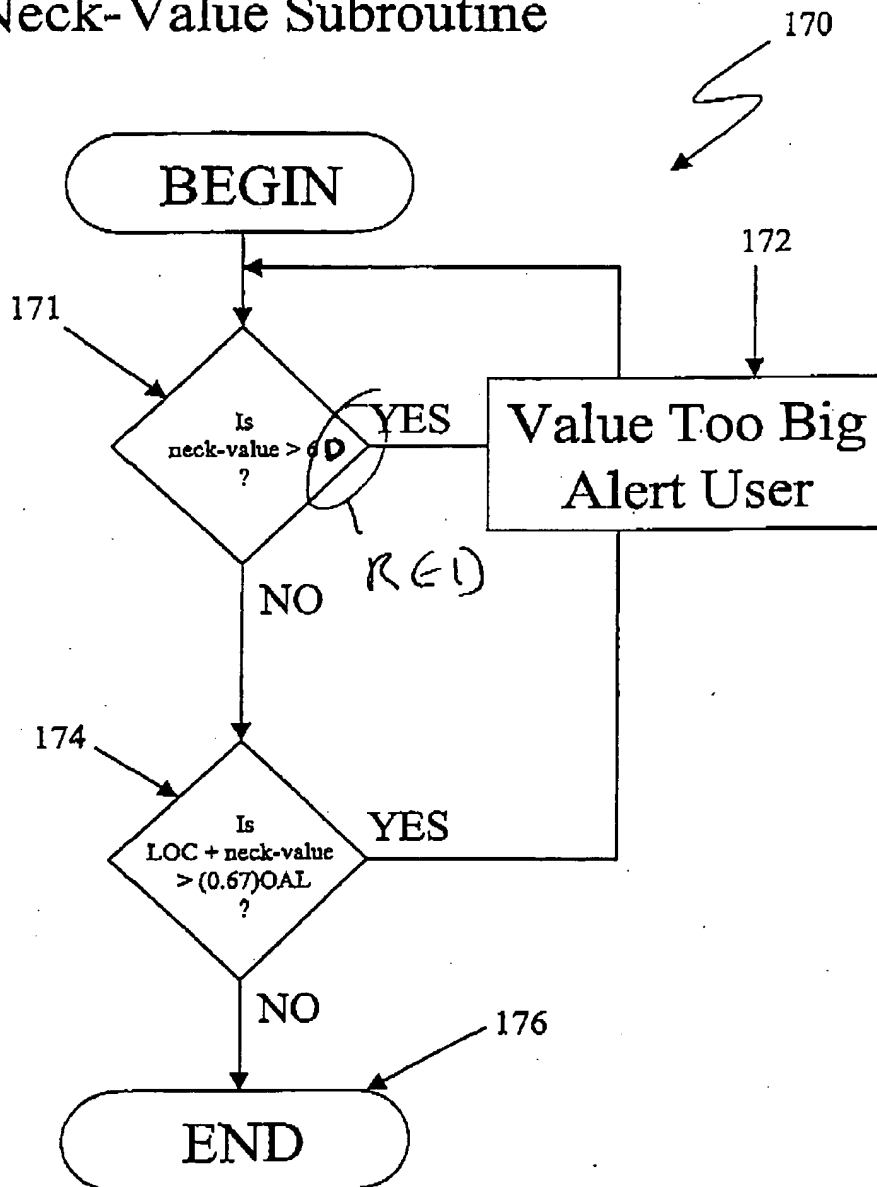
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**Fig. 9e**

## Neck-Value Subroutine

**Fig. 9g**